

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 March 2005 (03.03.2005)

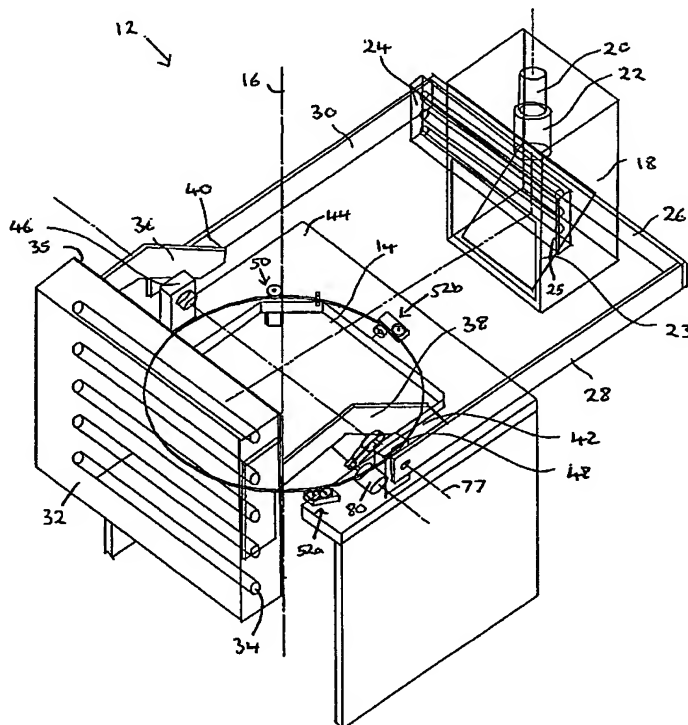
PCT

(10) International Publication Number
WO 2005/020144 A1

- (51) International Patent Classification⁷: **G06T 1/00** (72) Inventors; and
(21) International Application Number: PCT/GB2004/003581 (75) Inventors/Applicants (for US only): MATSUMURA, Koichi [JP/GB]; 24 Field Park, Warfield, Bracknell, Berkshire RG12 2DZ (GB). MASUDA, Masamichi [JP/JP]; 3-5-16, Saiwai-cho, Tachikawa-shi, Tokyo 190-0002 (JP). SHIMONISHI, Tatsunori [JP/JP]; 2-16-2-1017, Kokubu-Minami, Ebina-shi, Kanagawa, Tokyo 243-0405 (JP).
(22) International Filing Date: 20 August 2004 (20.08.2004)
(25) Filing Language: English
(26) Publication Language: English (74) Agents: WHITING, Gary et al.; Abel & Imray, 20 Red Lion Street, London WC1R 4PQ (GB).
(30) Priority Data: 0319677.1 21 August 2003 (21.08.2003) GB (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
(71) Applicants (for all designated States except US): CANON EUROPA, NV [NL/NL]; Bovenkerkerweg 59-61, NL-1185 XB Amstelveen (NL). CANON RESEARCH CENTRE EUROPE LTD [GB/GB]; The Braccans, London Road, Bracknell, Berkshire RG12 2XH (GB).

[Continued on next page]

(54) Title: IMAGE ACQUISITION SYSTEM FOR GENERATION OF THREE-DIMENSIONAL MODELS



(57) Abstract: A photographic apparatus and a method for taking images of an object for use in generating a three dimensional model of the object are described. The apparatus includes an object placement unit, an image capturing unit and an object illumination unit. The image capturing unit and the object illumination unit are connectedly moveable relative to the object placement unit so that in all positions of the image capturing unit and the illumination unit, the object can be placed on the object placement unit so that the illumination unit can provide the illumination required for the image capturing unit to take silhouette images of the object.



TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.